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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/723,738

11/26/2003

Franciscus Edwin Van Rooijen

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04/06/2006

HOWREY LLP

c/o IP Docketing Department

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EXAMINER

SAMPLE, DAVID R

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Cm

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/723,738	VAN ROOIJEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	David Sample	1755	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 30 January 2006.

2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) 7-9 and 12-14 is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-6, 10 and 11 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All    b) ☐ Some \*    c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____
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### **DETAILED ACTION**

Any rejections and/or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Election/Restrictions***

Applicant's election of claims 1-6, 10 and 11 in the reply filed on January 30, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election **without** traverse (MPEP § 818.03(a)).

Claims 7-9 and 12-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 30, 2006.

#### ***Claim Rejections - 35 USC § 103***

Claims 1-6, 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amiridis et al. (WO 95/15208) in view of Cooper et al. (WO 00/051940 A).

Amiridis et al. discloses a method of reducing nitrogen oxides by passing the nitrogen oxide over a zeolite Y having a framework silica/alumina ratio of greater than 25 with a unit cell size of less than 24.40 Å. See the abstract.

Amiridis et al. differs from the present claims in failing to disclose the bulk silica/alumina ratio of the zeolite or the water adsorption properties of the zeolites.

Cooper et al. discloses a hydrophobic zeolite Y having a silica/alumina ratio of 76-90 a unit cell size of 24.20 - 24.35 Å. See page 18, Table, 1, page 7, first full paragraph. Cooper et al. reports the silica/alumina ratio as "SAR"<sup>1</sup> and further reports the silica/alumina ratio of the starting material in terms of bulk ratio. See page 3, last paragraph, and page 7, first full paragraph. Thus, the SAR referred to by Cooper et al. appears to be in bulk form.

Cooper et al. does not disclose the water sorption properties in the same terms as employed by claim 1. However, the zeolite SAR and  $a_0$  of the Cooper et al. zeolite are identical the presently claimed zeolite. Moreover, the zeolite of Cooper et al. is described as "hydrophobic." For these reasons, one of ordinary skill in the art would have expected the zeolite of Cooper et al. to have the water absorption characteristics of the present claims.

The zeolite is useful as an adsorbent and catalyst. See page 1, "Field of Invention."

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the zeolite of Cooper et al. in the NO<sub>x</sub> reduction process of Amiridis et al. because the Amiridis et al. discloses employing zeolites with an  $a_0$  of less than 24.40 Å and a framework silica/alumina ratio of greater than 25 and Cooper et al. discloses such a zeolite.

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<sup>1</sup> Bulk ratio and SAR appear to be synonyms. See page 6, lines 1-4 of the instant specification.

***Response to Arguments***

Applicant's arguments with respect to claims 1-6, 10, and 11 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (571)272-1376. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (572)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Sample  
Primary Examiner  
Art Unit 1755